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FORM PTO-1449 <i>REC'D 10:30 AM 2/26/02</i>	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ABINITI.001CP1	APPLICATION NO. 10/047,460
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>MAR 26 2002</i>		APPLICANT Ciampi, et al.	
(USE SEVERAL SHEETS IF NECESSARY)		FILING DATE January 14, 2002	GROUP 1754

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	**WITH ENGLISH ABSTRACT ONLY
8JB	25 "Aubertin, N., et al., "Synthesis of potassium sulfatoferate and its use in wastewater treatment", <i>Revue des Sciences de L'Eau</i> , Vol. 9, no. 1, pp. 17-30 (1996).
	26 Audette, R. J. et al., "Ferrate (VI) ion, a novel oxidizing agent", <i>Tetrahedron Letters</i> , No. 3, pp. 279-282 (1971).
	27 Bartzatt, R., et al., "The kinetics of oxidation of low molecular weight aldehydes by potassium ferrate", <i>Transition Met. Chem.</i> , Vol. 11, pp. 414-416 (1986).
	28 Bartzatt, R., et al., "Removal of nitrosamines from waste water by potassium ferrate oxidation", <i>Archives of Environmental Health</i> , Vol. 46, No. 5, pp. 313-315 (1991).
	29 Bartzatt, R., et al., "Removal of toxic metals and nonmetals from contaminated water", <i>Journal of Toxicology and Environmental Health</i> , Vol. 35, pp. 205-210, (1992).
	30 BeMiller, J.N., et al., "Oxidation of carbohydrates with the ferrate (VI) ion", <i>Tetrahedron Letters</i> , no. 40, pp. 4143-4146, (1972).
	31 Bouzek, K. et al., "Influence of anode material composition on the stability of electrochemically-prepared ferrate(VI) solutions", <i>Journal of Chemical Technology and Biotechnology</i> , Vol. 74, pp. 1188-1194, (1999).
	32 Bouzek, K. et al. "Influence of anode material on current yields during ferrate(VI) production by anodic iron dissolution Part I: Current efficiency during anodic dissolution of grey cast iron to ferrate(VI) in concentrated alkali hydroxide solutions", <i>Journal of Applied Electrochemistry</i> , Vol. 26, pp. 919-923, (1996).
	33 Bouzek, K., et al., "Electrochemical production of ferrate(VI) using sinusoidal alternating current superimposed on direct current: grey and white cast iron electrodes", <i>Electrochimica Acta</i> , Vol. 44, pp. 547-557 (1998).
	34 Bouzek, K., et al., "Influence of electrolyte hydrodynamics on current yield in ferrate(VI) production by anodic iron dissolution", <i>Collect. Czech. Chem. Commun.</i> , Vol. 65, pp. 133-140, (2000).
	35 Bouzek, K., et al., "The cyclic voltammetric study of ferrate(VI) production", <i>Journal of Electroanalytical Chemistry</i> , Vol. 425, pp. 125-137, (1997).
	36 Carr, J. D., et al., "Properties of ferrate (VI) in aqueous solution: an alternative oxidant in wastewater treatment", <i>Proceedings of the Conference on Water Chlorination and Chemical Environmental Impact Health Effects</i> , (ED. Lewis Chelsea), pp. 1285-1290 (1985).
	37 CiCi, M., et al., "Production of some coagulant materials from galvanizing workshop waste", <i>Waste Management</i> , Vol. 17, No. 7, pp. 407-410, (1997).
	38 de Luca, S.J., et al., "Quality improvement of biosolids by ferrate(VI) oxidation of offensive odour compounds", <i>Wat. Sci. Tech.</i> Vol. 33(3), pp. 119-130, (1996).
	39 Deininger, J.P., et al., "Developments in transuranic element polishing from radioactive wastewaters using ferrate( $FeO_4^{2-}$ ) chemical technology", <i>Waste Manage. '90</i> , vol. 1, pp. 789-795, (1990).
	40 Denvir, A., et al. "Electrochemical generation of ferrate, Part I: Dissolution of an iron wool bed anode" <i>Journal of Applied Electrochemistry</i> , Vol. 26, pp. 815-822, (1996).
	41 Fagan, J., et al., "Biofouling control with ferrate (VI)", <i>Environ. Sci. Technol.</i> , Vol. 17, pp. 123-125 (1983).
	42 Goff, H., et al., "Studies on the mechanism of isotopic oxygen exchange and reduction of ferrate (VI) ion ( $FeO_4^{2-}$ )", <i>Journal of the American Chemical Society</i> , Vol. 93, No. 23, (November 17, 1971).
	43 Gilbert, M., et al., "Analytical Notes-An investigation of the applicability of ferrate ion for disinfection", <i>Water Technology/Quality</i> , pp. 495-497, (September 1976).
	44 Grube, G., et al., "The electrolytic formation of the alkali salts of ferrous oxide and of ferric oxide", <i>Z. Elektrochem.</i> , Vol. 26, pp. 459-471, (1920).
	45 Kazama, F., "Respiratory inhibition of <i>sphaerotilus</i> by potassium ferrate" <i>Journal of Fermentation and Bioengineering</i> , Vol. 67, No. 6, pp. 369-373, (1989).
	46 Kazama, F., "Viral inactivation by potassium ferrate", <i>Wat. Sci. Tech.</i> , Vol. 31, No. 5-6, pp. 165-168, (1995).
	47 "Kazama, F., et al., Oxidation of organic matters in waste waters and fluvic acid by potassium ferrate (VI)", <i>Department of Environmental Engineering</i> , Vol. 34, pp. 100-104 (1984).
	48 "Kazama, F., et al., "Oxidative changes of organic characters in the waters by ferrate (VI) treatment", <i>Department of Environmental Engineering</i> , Vol. 35, pp. 117-122 (1984).
	49 Kiselev, Y.K., et al., "The preparation of alkali metal ferrate(VI)", <i>Russian Journal of Inorganic Chemistry</i> , Vol. 34, No. 9, pp. 1250-1253, (1989).
	50 Licht, S., et al., "Chemical synthesis of battery grade super-iron barium and potassium Fe(VI) ferrate compounds", <i>Journal of Power Sources</i> , Vol. 99, pp. 7-14, (2001).
8JB	51 Licht, S., et al., "SrFeO <sub>4</sub> synthesis, Fe(VI) characterization and the strontium super-iron battery", <i>Electrochemistry Communications</i> , Vol. 3, pp. 340-345, (2001).

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*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.			

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8JB	52	Licht, S., et al., "Insoluble Fe(VI) compounds: effects on the super-iron battery", Electrochemistry Communications, Vol.1, pp. 522-526, (1999).	
	53	Licht, S., et al., "Solid phase modifiers of the Fe(VI) cathode: effects on the super-iron battery", Electrochemistry Communications, Vol. 1, pp. 527-531, (1999).	
	54	Licht, S., et al., "Energetic iron(VI) chemistry: The super-iron battery", Science, Vol 285, pp. 1039-1042, (August 13, 1999).	
	55	Neveux, N., et al., "Synthesis of stabilized potassium ferrate and its applications in water treatment", EPD Congress, (ED. B. Mishra), pp. 215-224, (1999).	
	56	Ozernoi, M.I., et al., "Sulfide ion oxidation by sodium ferrate(VI) in water", Ecol. Chem., Vol. 4, No.3, pp. 208-212, (1995).	
	57	Potts, M.E., et al., "Removal of radionuclides in wastewaters utilizing potassium ferrate(VI)", Water Environment Research, Vol. 66, No. 2, pp. 107-109, (1994).	
	58	Scholder, R., "Recent investigations on oxometallates and double oxides", Angew. Chem. Internat. Edit., Vol.1, No. 4, pp. 220, (1962).	
	59	Schreyer, J.M., et al. "Stability of the ferrate(VI) ion in aqueous solution", Analytical Chemistry, Vol. 23, No.9, pp. 1312-1314, (1951).	
	60	Stoupine, D., et al., "The simulation of heavy metals removal from wastewaters by the sodium ferrate(VI) treatment", Proceedings of the International Conference on Environmental Engineering and Chemical Engineering", (ICEECE'97) (eds. Qian, Y. and Huanqin, C), South China University of Technology Press, Guangzhou, pp. 63-36, (1997).	
	61	Stoupine, D., et al., "The peculiarities of the iron oxides/hydroxides sediment formed in sodium ferrate(VI) use as coagulant in water treatment", Proceedings Of The International Conference On Environmental Engineering And Chemical Engineering, (ICEECE'97) (eds. Qian, Y. and Huanqin, C), South China University of Technology Press, Guangzhou, pp. 29-32, (1997).	
	62	Stupin, D.Y., et al., "Coprecipitation of <sup>152</sup> Eu with iron(III) hydroxide formed upon reduction of sodium ferrate(VI) in aqueous medium", Radiochemistry, Vol. 37, No. 4, pp. 329-332 (1995).	
	63	Sylvester, P., et al., "Ferrate treatment for removing chromium from high-level radioactive tank waste", Environmental Science and Technology, Vol. 35, No. 1, pp. 216-221, (2001).	
	64	Thompson, G., et al., J. Am. Chem. Soc., "New derivative of dinaphthylethane", Vol. 73, pp. 1379-81 (1951).	
	65	Venkatadri, A.S., et al., "Ferrate(VI) analysis by cyclic voltammetry", Analytical Chemistry, Vol. 43, No. 8, pp. 1115-1119, (July 1971).	
	66	Wagner, W.F., et al., "Factors affecting the stability of aqueous potassium ferrate(VI) solutions", Analytical Chemistry, Vol. 24, pp. 1947-1948, (1952).	
	67	White, D.A., et al. "A preliminary investigation into the use of sodium ferrate in water treatment", Environmental Technology, Vol. 19, pp. 1157-1161, (1998).	
8JB	68	Williams, D. et al., "Preparation and alcohol oxidation studies of the ferrate (VI) ion, FeO <sub>4</sub> <sup>2-</sup> ", Inorganica Chimica Acta, Vol. 8, pp. 177-183, (1974).	
8JB	69	Wood, R. H., "The heat, free energy and entropy of the ferrate (VI) ion", J. Am. Chem. Soc., Vol. 80, pp. 2038-2041 (1957).	

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
8JB	70	99 29628 A	06/17/99	PCT		X	

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<b>APPLICANT</b> Ciampi, et al.		
<b>FILING DATE</b> January 14, 2002 <b>GROUP</b> 1754		

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
<i>8JB</i>	1	2,758,084	08/07/56	Deyrup, et al.			
	2	2,758,090	08/07/56	Mills, et al.			
	3	2,835,553	05/20/58	Harrison, et al.			
	4	3,985,770	10/12/76	Collman, et al.			
	5	4,198,296	04/15/80	Doumas, et al.			
	6	4,304,760	12/08/81	Mein, et al.			
	7	4,385,045	05/24/83	Thompson			
	8	4,405,573	09/20/83	Deininger, et al.			
	9	4,435,257	03/06/84	Deininger, et al.			
	10	4,435,265	03/06/84	Birkle, et al.			
	11	4,451,338	05/29/84	Deininger, et al.			
	12	4,500,499	02/19/85	Kaczur, et al.			
	13	4,545,974	10/08/85	Thompson			
	14	4,551,326	11/05/85	Thompson			
	15	4,983,306	01/08/91	Deininger, et al.			
	16	5,202,108	04/13/93	Deininger			
	17	5,217,584	06/08/93	Deininger			
	18	5,234,603	08/10/93	Potts			
	19	5,284,642	02/08/94	Evrard, et al.			
	20	5,370,857	12/06/94	Deininger			
	21	5,380,443	01/10/95	Deininger, et al.			
	22	5,746,994	05/05/98	Johnson			
<i>8JB</i>	23	5,997,812	12/07/99	Burnham, et al.			
	24	6,187,347	02/13/01	Patterson			

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10/047,460

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APPLICANT  
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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
SYB	1	Jiang, et al., Progress in the development and use of ferrate(VI) salt as an oxidant and coagulant for water and wastewater treatment, Water Research 36 (2002) 1397-1408, no month.
SYB	2	Lescuras-Darrou, et al., Electrochemical ferrate generation for waste water treatment using cast irons with high silicon contents, Journal of Applied Electrochemistry 32: 57-63, 2002, no month.
SYB	3	Powell Fabrication and Manufacturing Inc, Guide to Powell Products & Services, 30 pp, undated
SYB	4	Powell Fabrication and Manufacturing Inc, drawing of Batch Bleach System, 04/25/2002

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